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Procedia - Social and Behavioral Sciences 159 (2014) 375 – 380

Procedia
Social and Behavioral Sciences

WCPCG 2014

Prevalence of Suicidal Behavior Among Male Drug Users in Kosovo

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Abstract

The aim of this study is to evaluate the prevalence of suicidal behavior among male drug users in Kosovo. The study included 209 participants aged 15 to 52 years old from Kosovo. The total sample consisted of two subsamples; one composed of drug users and one for the general population. Results indicate that the prevalence of suicidal behavior is higher among drug users compared to the general population. However, there was no difference in behavior with regard to the type of drug used or abuse of more than one substance. The findings in this study suggest that exposure to drugs may increase the vulnerability to suicidal behavior, regardless of the type of drug abused.

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Peer-review under responsibility of the Academic World Education and Research Center.

Keywords: drug abuse, suicidal behavior, suicidal ideas, drug users, general population

1. Introduction

Suicide is a major health problem in the general population as well as among the population of drug users. About 34,000 people commit suicide every year in America and suicide is considered as the 11th leading cause of deaths in America (Centers for Disease Control and Prevention, 2010). Research has shown that the age range 18-25 years old carries higher risk for suicidal behaviour compared to the age group of over 26 years old (National Survey on Drug Use and Health, 2009). In Kosovo suicide is quite a recent phenomenon which has seen a dramatic increase after the war in Kosovo in 1999 (Tancic & Temnik, 2008). Likewise, the suicide attempts have also increased in the recent years (Tancic & Temnik, 2008). Regarding drug use, it is estimated that about 3.3% to 6.1% of people in the world have at least once in their lives used illegal substances and half of them were actual users of such substances,

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whereas, about 15-39 million people in the world have had problems with substance use such as substance dependence (United Nations Office on Drugs and Crime, 2011). In Kosovo as well, prevalence of drug use has increased dramatically in 2001 and it is assumed that this increase is related to psychological, social and economic consequences of the war and to the possibility of finding drugs easily (Country Mission Report (CMR), 2006). Recent studies show that there is a link between drug use and suicidal behaviour, about 90% of people who commit suicide experience a mental or substance abuse disorder, or both (Lesage et al., 1994; Moscicki, 2001; SAMHSA, 2008; Wunderlich, Bronsich & Wittchen, 1998). In addition, research has suggested that two major factors that increase the risk for suicide are considered to be mental disorders, in particular depression and substance abuse disorder (Moscicki, 2001; Yoshimasu, Kiyohara & Miyashita, 2008).

1.1 Current Study

As drug use increases the vulnerability to suicidal behaviour (Bakhshani et al., 2010; Eaton et al., 2011; Rossow, 1994; Rossow & Lauritzen, 2001) and since after the war in Kosovo there has been a steady increase in the number of drug users (CMR, 2006), the primary goal of this study is to evaluate whether the prevalence of suicidal behaviour is higher among drug users compared to the general population in Kosovo. Although Degnehardt et al., (2005) found that the use of opioids is the most common factor that leads to suicidal behaviour compared to other types of drugs, various studies have revealed that all types of drugs are associated to suicidal behaviour, including opiates (Degnehardt et al., 2005), cannabis (Fergusson, Horwood & Swain-Campbell 2002; Pederson, 2008), and stimulants (Garlow, 2002; Garlow, Purselle & D'Orio, 2003; Marshall, Galea, Wood & Kerr, 2011). On the other hand, Borges, Walters & Kessler (2000), have suggested that using more than one substance can be considered an important risk factor in suicidal behaviour compared with the use of only one type of drug (Borges et al., 2000). In this frame this study intends to explore the relation between the type of drug used and the suicide attempts, as well as the relation between the numbers of substances used with the suicidal attempts. On this basis, the two hypotheses are as follows:

H1: Prevalence of suicidal behaviour will be higher among drug users compared to the general population.
H2: People who have used more than one substance are more likely to display suicidal behaviour compared with users who have used only one type of drug.

2. Methods

2.1 Study sample

The study was conducted in two different health care centres. The sample of drug users was drawn in the Labyrnith centre, which aims at preventing infections of Hepatitis B and C and HIV - AIDS among drug users, and treatment of this population. This centre operates in three major cities of Kosovo, in Prishtina, Prizren and Gjilan. According Labyrith center statistics, these towns have the highest number of drug uses. From 2002 until the first half of 2012, about 900 drug users were registered in this centre, whereas the daily frequency varies between 30 to 60 persons daily (Blakaj, personal communication, May 17, 2012). The general population sample was drawn in the Central Health Care Public Service in Prizren, due to the high accessibility of the research team in this service. In this study there participated, 209 subjects; 53.6 % (n = 112) representing the general population and 46 % (n = 97) from populations of drug users. 23.9 % of the participants were aged 15-24 years, 43.5 % aged 25-34, 27.8 % aged 35-44 years and 4.8 % aged 45 to 52 years. The sample was selected by the stratified method; that is, sample number and age group was selected based on the number and age group of clients registered in the Labyrinth centre in the last two years. The clients who were interviewed were initially asked about their age and if they have ever had any psychological disorders or a serious health problem.

3. Instruments

This study made use of three questionnaires: demographic data questionnaire, suicidal thoughts questionnaire and the questionnaire for abuse / dependence on drugs. The latter was administered only on the sample of drug users. The questionnaire for demographic data was administered on the general population. This questionnaire was drafted

by the researcher and was based on the typical questions and information items provided in the clients' files at the Labyrinth centre. Originally it comprises 10 questions, however, when this questionnaire was administered on the sample of drug users, several questions on the use and injection of drugs and the use of other substances were added. The questionnaire for thoughts about death and suicide (Marusic, Roškar & Zorko, 2004) is an anonymous self-reporting scale containing questions addressing the presence or absence of suicidal thoughts, suicide attempts and family history of suicide or suicide attempts. Each question includes a sub-question and all questions are answered with "yes" and "no." This questionnaire is not standardized in Albanian, although it was used in several studies in Kosovo (Brisson, Arënlju & Platais, 2009; Arënlju, 2009) and has demonstrated high reliability. The questions of the questionnaire are divided into three categories that evaluate ideas, behaviour, and family history (Marusic and Farmer, 2001). The questionnaire for addiction/substance abuse was drafted by the researcher relying on the criteria for dependence/abuse of drugs as described in DSM - IV - TR (APA, 2000)[†], after they were translated and adapted into Albanian. It comprises 11 questions; seven questions address substance dependence and the remaining four are associated with substance abuse. This questionnaire was administered only to the population of drug users in order to differentiate between participants who have abused and those who have been addicted to substances.

4. Procedure

All three aforementioned questionnaires were administered on the drug users sample, whereas on the general population only the questionnaire for demographic data and the questionnaire for death and suicide was administered. Completion of the questionnaire took 5 to 15 minutes, while the administering of questionnaires lasted for one month and was applied in parallel in all centres. Due to the small number of female drug users, this study comprised only male participants. Persons who had mental disorders or serious medical illnesses, such as persons with cancer, neurological diseases, and heart disease, were excluded from the study since these factors may have an impact on the suicidal behavior (Barraclough, Bunch, Nelson & Sainsbury, 1974 ; Hirokawa et al., 2012; Stenager & Stenager, 2000). We excluded the clients on the methadone program from the sample as they do not meet the criteria for substance abuse/dependence. In this study, the informed consent was initially taken from respective centres followed by the informed consent from each participant. During the administration of questionnaires, attention was paid to ensuring the quietude and privacy of participants. At the end of the administration procedure, the questionnaire responses were checked for suicidal thoughts in order to identify persons who showed risk for suicidal behaviour and thus referred to mental health professionals.

5. Results

In order to measure the impact of suicidal behaviour, the results were computed separately for suicidal ideas and behaviour, accordingly to the structure of the questionnaire. Results for suicidal ideas showed that there were significant differences in the mean value for drug users ($M = 4.75$, $SD = 1.25$) and for the general population ($M = 4.15$, $SD = .50$), $t(123,027) = -4.429$, $p < .001$. The same analysis was performed to evaluate the differences between samples in regard to suicidal behaviour. Results showed moderate but significant differences in the mean values for drug users ($M = 2.26$, $SD = .60$) and for the general population ($M = 2.01$, $SD = .18$), $t(112,267) = -3.916$, $p < .001$. These statistics are shown in Table 1.

[†]In this study, the research team relied on DSM-IV-R criteria, as DSM-V was not published yet at the time of this study implementation.

Table1. Mean values and standard deviations of suicidal ideas and behaviour for the population sample (n = 112) and for the drug users sample (n = 97)

	General population	Drug Users	T	Df
Suicidal ideas	4.15 (.50)	4.75 (1.25)	-4.429	123.027
Suicidal behaviour	2.01 (.18)	2.26 (.60)	-3.916	112.267

Note: All findings are statistically significant at level $p < .001$. Standard deviation is indicated in parentheses under the mean value.

For the second hypothesis, have shown that there is no significant impact neither on the behaviour $F(4:51) = 1.42$, $p < .231$, nor on the ideas $F(4:53) = 2.39$, $p < .056$. The independent variable was using drugs with 7 levels: hallucinogens, depressants, stimulants, painkillers, more than one drug of the same class, more than one drug category, more than one substance. The dependent variable was suicidal behaviour.

Table 2. Suicidal ideas and behaviour accordingly to the type of used drug (hallucinogen, depressant, more than one drug of the same class, more than one drug category, more than one substance).

		Hallucinogen	Depressant	More than one drug of the same category	More than one category of drugs	More than one substance	F
Behaviour	M	2.75	2.25	2.1	2.17	2.42	1.427
		0.95	0.64	0.31	0.45	0.74	
Ideas	M	5.5	4.92	4.2	4.41	5.19	2.391
		(1.91)	(1.3)	(.42)	(.89)	(1.6)	

Note. * $p \leq .23$, *** $p \leq .056$. Standard deviation is indicated in parentheses under the mean value

6. Discussion

The main purpose of this study was to assess whether suicidal behaviour is higher amongst drug users as compared with the general population in Kosovo. The relation between drug use and suicidal behaviour was shown to be significant, which was in line with the expectations of this hypothesis. In particular, similarly with previous studies (Garnefski & Wilde, 1998; Harris & Barraclough, 1997), the findings in the present study demonstrated that drug users have a higher tendency to display suicidal behaviour compared to the non-user population. Previous studies have supported the relation between drug use and suicidal behaviour. The control theory of drug abuse (Gold, 1980) provides a possible explanation according to which, both drug use and suicidal behaviour are regarded as self-destructive behaviours; moreover, as noted above, drug abuse is considered as slow suicide (Gold, 1980). Since there is a relation between these two factors, it is likely that factors driving these people to use drugs could be the same factors that push them to suicidal behaviour. It is therefore not surprising that drug users in particular have higher rates of suicidal behaviour. In addition, the negative effects of drugs on individual behaviour (Bolognini et al., 2002) can lead to suicidal behaviour. However, it is noteworthy that only men participated in this study. Previous studies have shown that men show higher rates of committing suicide, compared to women who show higher rates of suicidal attempts (Cantor, 2000; Waldinger, 2005). Therefore, the lack of women participants in this study may have influenced these findings. The second goal of this study was to examine the relation between the

number of drugs used with the presence of suicidal thoughts and/or behaviour. Contrary to our expectations expressed by the second hypothesis, the data showed no significant differences in suicidal ideas and behaviour among participants who used more than one substance and those who have used one particular type of drug. However, it should be noted that according to the author's knowledge there has been only one study in this direction (Borges et al., 2000) which has conducted such a comparison in order to see if it is the type of drug that increases the risk for suicidal ideas and behaviour or the use of more than one substance. Therefore, the lack of studies in this direction and the results of the present study show that this issue needs to be researched more thoroughly in order to reach a more accurate conclusion.

7. Conclusions

Findings of this study showed that the prevalence of suicidal behaviour was higher among the population of drug users than in the general population. Therefore, identification of suicidal ideas and behaviour amongst drug users is a very important element in counselling in order to prevent suicide among this population. On the other hand, the study suggests that regardless of the type of drug used, the risk for suicidal behaviour is almost the same whether using a special category of drugs or if they are mixed with other substances like alcohol or painkillers. In conclusion, since there is a significant relation between suicidal behaviour and drug abuse, future studies can focus on discovering the cause and effect link between these two variables.

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